All exposed concrete edges shall have a 34 " x 45° chamfer, except where shown otherwise. Chamfer on vertical edges shall be continued a minimum of one foot below finished around level.

Bridge Seat Sealer shall be applied to the seat area of the Abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{l}_{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $^{l}_{8}$ adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two $^{l}_{8}$ adjusting shims shall be provided for each bearing and placed as detailed.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

REINFORCING BARS

Reinforcement bars shall conform to the requirements of AASHTO M-31 Grade 60, deformed bars.

Cover from the face of concrete to face of reinforcement bars shall be 3" for surfaces formed against earth and 2" for all other surfaces unless otherwise shown.

Reinforcement bar bending dimensions are out to out.

Reinforcement bending details shall be in accordance with the "Manual of Standard Practice for Detailing Reinforced Concrete Structures". ACI 315, latest edition.

Reinforcement bars designated "(E)" shall be epoxy coated.

Reinforcement bar splices shall be in accordance with the following table unless shown otherwise on the drawing.

CLASS "C" SPLICE (Grade 60 Bars)

Size	f'c = 3,500 PSI	f'c = 4000 PSI
#4	1'-9"	1'-9"
#5	2'-2"	2'-2"
#6	2'-7"	2'-7"
#7	3′-6"	3'-3"
#8	4'-7"	4'-3"
#9	5′-9"	5'-5"
#10	7′-4"	6'-10"
#11	9'-0"	8'-5"

CONSTRUCTION

Do not scale dimensions for construction, scale applies only to full size drawings

No construction joints except those shown on the plans will be allowed unless ordered by the Engineer.

Raised bearing areas shall be cast monolithically with the rest of the structure and ground to the elevations shown.

Temporary sheeting, bracing or cofferdams shall be constructed as required for the excavation to protect the adjacent areas from settling or falling into the excavated areas.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Pourous Granular Backfill, Special shall be placed behind the abutment after the superstructure has been placed and the falsework removed. See Special Provisions and Section 210 of the Standard Specifications.

After the beams or girders are set, all elevations for determining fillet heights shall be taken at one time.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection.

STRUCTURAL STEEL

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are (the wide flange beams) (the tension flanges, webs) and all splice plate material except fill plates.

Anchor bolts shall be set before bolting diaphragms (bolting cross frames) over supports.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

All structural steel shall be ASTM A709, Grade 36 unless otherwise noted.

Fasteners shall be high strength bolts ASTM A325, Bolts $^{7}8''$ ϕ , open holes $^{15}16''$ ϕ , unless otherwise noted.

Calculated Weight of Structural Steel = 183,380 lb.

The Inorganic Zinc Rich Primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The Color of the finish coat for all Interior Steel Surfaces shall be Gray, Munsell No. 5 B 7/1.

The Color of the finish coat for the Exterior and Bottom Flange of the Fascia Beams shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures." TOTAL BILL OF MATERIALS

С.Н.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NA	98-00009-00-BR	SANGAMON	107	39
FED.	ROAD DIST. NO. ILLIN	OIS FED. AID PR	OJECT	
M.P.179 SPRINGFIELD SUBDIVISION				
	SHEET 2 (OF 27		

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0200100	ITEM POROUS GRANULAR BACKFILL, SPECIAL STRUCTURE EXCAVATION CONCRETE STRUCTURES CONCRETE SUPERSTRUCTURE	UNIT TON CU YD CU YD	ESTIMATED QUANTITIES 72 273 219.7	RECORD QUANTITIES
0200100	STRUCTURE EXCAVATION CONCRETE STRUCTURES	CU YD	273	
0300225	CONCRETE STRUCTURES	CU YD		
300255			219.7	
	CONCRETE SUPERSTRUCTURE	CII YD		
0300516		COTD	205.2	
1	ELASTOMERIC BEARING ASSEMBLY, TYPE 1 (SPECIAL)	EACH	6	
0500405	FURNISHING AND ERECTING STRUCTURAL STEEL	LB	183,380	
0800105	REINFORCEMENT BARS	LB	145,290	
1205200	TEMPORARY SHEET PILING	SQ FT	162	
51500100	NAME PLATES	EACH	1	
8000110	MEMBRANE WATERPROOFING (SPECIAL)	SQ FT	3,345	
0321017	BRIDGE FENCE RAILING, PARAPET MOUNTED	FOOT	323	
0696000	BRIDGE DRAINAGE SYSTEM	L. SUM	1	
. •	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 48" (SPECIAL)	F00T	207	
0008236	DRILLED SHAFT IN SOIL 36"	F00T	114	
0008248	DRILLED SHAFT IN SOIL 48"	F00T	66	
0008336	DRILLED SHAFT IN ROCK 36"	FOOT	40	
0008348	DRILLED SHAFT IN ROCK 48"	F00T	60	
	0800105 205200 1500100 8000110 0321017 0696000 008236	1500100 NAME PLATES 8000110 MEMBRANE WATERPROOFING (SPECIAL) 0321017 BRIDGE FENCE RAILING, PARAPET MOUNTED 1696000 BRIDGE DRAINAGE SYSTEM FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 48" (SPECIAL) 1008236 DRILLED SHAFT IN SOIL 36" 1008248 DRILLED SHAFT IN SOIL 48"	DBOO105 REINFORCEMENT BARS LB 205200 TEMPORARY SHEET PILING SQ FT 1500100 NAME PLATES EACH BO00110 MEMBRANE WATERPROOFING (SPECIAL) SQ FT 0321017 BRIDGE FENCE RAILING, PARAPET MOUNTED FOOT 1696000 BRIDGE DRAINAGE SYSTEM L. SUM FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 48" (SPECIAL) FOOT 1008236 DRILLED SHAFT IN SOIL 36" FOOT	1800105 REINFORCEMENT BARS LB 145,290

^{*} SEE SPECIAL PROVISIONS

INDEX OF SHEETS

	SHEET NO.	
	1. 2.	General Plan and Elevation Bill of Material and General Notes
	3.	General Bridge Sections
	4.	Footing Plan and Temporary Sheet Pil
	5.	South Vaulted Abutment Details
	<i>6.</i>	South Curtain Wall Details
	7.	North Vaulted Abutment Details
LEGEND	8.	North Curtain Wall Details
	9.	Vault Details
P.G.L Profile Grade Line	10.	Vault Diaphragm Details
N.A North Abutment	11.	48" P.P.C. I-Beam Details
S.A South Abutment	12.	Abutment Diaphragm Details
E.E Each End	<i>13</i> .	South Vault Deck Plan
E.F Each Face	14.	North Vault Deck Plan
F.F Front Face	<i>15</i> .	Steel Framing Plan
B.F Back Face	16.	Steel Details
I.F Inside Face	17.	Bearing Details
O.F Outside Face	18.	Main Span Deck Plan
W.P Working Point	19.	Waterproofing and Deck Drains
P.J.F Preformed Joint Filler	20.	Curb Details
P.J.S Preformed Joint Sealer	21.	Railing Details
R.O.W Right-of-way	22-25.	Deck Elevations
T.R Top of Rail	26.	Anchor Bolt Details
,	27.	Bridge Soil Borings

BILL OF MATERIAL AND
GENERAL NOTES
UNION PACIFIC RAILROAD
OVER MEREDITH DRIVE
SANGAMON COUNTY
SEC. 98-00009-00-BR
STA. 9437+93.49
STRUCTURE No. 084-9946



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DESIGNED BY:	CHECKED BY:	DRAWN BY:	DATE:	
G.B.M.	D.R.B.	J.P.H.	1-3-03	

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